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| 10/008,581 | 11/13/2001 | Samuel H. Russ | A-6885 | 6608 |

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| EXAMINER | |
|---|---|
| HUYNH, SON P | |
| ART UNIT | PAPER NUMBER |
| 2623 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|---|---|---|
| 3 MONTHS | 12/18/2006 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/008,581 | RUSS ET AL. | |
| | Examiner | Art Unit | |
| | Son P. Huynh | 2623 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *25 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-21 and 52-63* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21 and 52-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-21, 52-63 have been considered but are moot in view of the new ground(s) of rejection.

Claims 22-51 and 64-113 have been canceled.

### *Claim Objections*

2. Claims 16, 52-63 are objected to because of the following informalities:

Claim 16 recites the limitation "the system" should be replaced as – the master STT-

Claim 52 recites the limitation "the receiver" in line 12, should be replaced as – the first receiver--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Rakib et al. (US 2004,0172658).

Regarding claim 1, Rakib discloses a master set top box terminal (read on the gate way 14, figures 1, 4a, 4b) comprising:

a first tuner tuning to a television signal from a received multiplexed signal into a first tuned television signal (e.g. tuner 100 selects a television signal from multiplexed signal received via network 10 – figures 4a-4b; paragraphs 0056, 0119-0122);

a second tuner tuning the television signal from the received multiplexed signal into second tuned television signal (e.g. tuner 102 or 104 selects the signal from the multiplexed signal received via network 10 – figures 4a-4b, paragraphs 0056, 0119, 0122).

an encoder coupled to the first tuner and receiving the first tuned television signal and digitally encoding the first tuned television signal A/D matrix and MPEG encoder receives the signals from tuner 100 and encode the signal – figure 4a-4b, paragraphs 0123-0124);

a transmitter coupled to the encoder and transmitting the encoded signal to a remote STT to be displayed on a viewing device (e.g. IP video 158 and routing circuit 86 coupled to MPEG encoder and transmitted encoded signal to a display adapter to be displayed on a viewing device 139 – figures 3, 4a-4b);

a receiver receiving a control signal from the remote STT corresponding to a user input; and a controller coupled to the receiver and configured to accept the control signal from the receiver and instruct the first tuner to change the tuned television signal in response thereto, such that the transmitter transmitted a changed encoded signal to the remote STT for display on the viewing device (host microprocessor and condition access control receives a signal to tune to another television signal from multiplexed signal, determines access control and control the tuner 100 to tune to different signal and provides current tuned signal to the encoder for encoding and sends the encoded signal to the display adapter for display on a display (139) – figures 3 –4b).

Regarding claim 16, Rakib further discloses the system comprises an Internet connection (e.g. cable modem), and the transmitter is capable of transmitting content derived from the Internet connection to the remote STT (the transmitter at the gateway is capable of transmitting content from Internet to the video adapter – figures 2-4; paragraphs 0061, 0081).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2-14, 17-21, 52-59, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib et al. (US 2004,0172658).

Regarding claims 2-3, Rakib teaches a "master STT" as discussed in the rejection of claim 1. Rakib further discloses LAN(s) 18 and 20 for connection between gateway and receiving device(s). The gateway performs the functions such as VOD, VCR like functions, tune to particular television signal, etc. as requested by the user at the viewing device and send the requested television signal to the viewing device. (figures 4a-5, paragraphs 0049-0051, 0059, 0079). One skilled in the art can select any delay time period to display the encoded signal at the receiving device as desired by the user but limited to the capability and characteristics of the transmission medium and devices communicating on the medium between the device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the time period within two seconds, within a half-second as desired by the user but

limited to the capability and/or characteristics of the transmission medium and devices communicating on the medium.

Regarding claim 4, Rakib further discloses LAN are 10Base-T phone line or Cat 3,4, or UTP, twisted pair phone line already wired, or CAT 5 wiring, or the coax, etc. (paragraph 0079). The transmitter and receiver operate according to a wireline standard selected from the group consisting of Homeplug and HomePNA (e.g. phone line).

Regarding claim 5, Rakib further discloses communication between gateway and receiving device using LAN networks 18 and 20 which can be wire LAN system or an RF or infrared wireless LAN system. The LAN system can be high speed or low speed (paragraphs 0079-0081, 0087, 0104-0105). It is obvious that the transmitter and receiver operate according to a wireless standard (RF or IR wireless LAN system ) selected from the group consisting of IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, Bluetooth 2.0, HomeRF 2.0, HiperLAN/2, and Ultra-Wideband standards in order to expand capabilities of the system.

Regarding claim 6, Rakib further discloses the video encoder uses a form of digital compression (e.g. MPEG- figures 4a-4b, paragraphs 0051, 0123).

Regarding claim 7,Rakib further discloses the LAN networks 18 and 20 also serve the dual purpose of allowing the computers on the network to communicate with each other

and share resource such as shared hard disks, printer, etc. For example, PC 22, which is typical a Windows based personal computer. The LAN also used to deliver high bandwidth consuming services such as video conferencing (paragraphs 0080-0081). It is obvious that the video encoder is selected from the group consisting of microsoft Netmeeting, Windows Media Player, and Real Player so that the share resoures (e.g. video conferencing) between the users are displayed.

Regarding claims 8-10, Rakib discloses a master STT as discussed in the rejection of claim 6. Rakib further discloses encoding and/or translate the compressed digital data to low rate when necessary because of current loading conditions on the LAN. However, Rakib does not specifically disclose immediately encoding and transmitting a lower quality video signal and then transmitting higher quality video signal after a period of time during which the lower quality video signal is transmitted, the period of low quality video transmission allows the higher quality video signal to be encoded for transmitted. Official Notice is taken that low latency for transmission signal between two devices is achieved by immediately encoding and transmitting a lower quality signal first and then transmitting the high quality signal is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib to use the well-known teaching of immediately encode the data in low quality for transmission and then transmitting the high quality signal as taught in the art in order to minimize waiting time for the user.

Regarding claims 11-12, Rakib further discloses the encoding format is MPEG-2 or MPEP 4 (paragraphs 0051, 0088, 0124).

Regarding claim 13, Rakib further discloses encoding the digital data and/or translate the compressed video down to a lower rate when necessary because of the current loading condition (paragraph 0237-0237). The LANs includes high speed and low speed LAN. The LAN(s) are used to deliver services such as video conferencing, video on demand, or any other share sources (paragraphs 0079-0081). It would have been obvious to one of ordinary skill in the art that the encoding format is H.236 in order to provide video content in different format thereby improve efficiency in data transmission.

Regarding claim 14, Rakib further discloses the transmitted signal include and encoding parameter (e.g. MPEG) enabling the remote STT (video adapter) to decode the transmitted signal using multiple decoding algorithms according to the encoding parameter (see include, but not limited to, figures 3-5).

Regarding claims 17-18, the limitations as claimed correspond to the limitations as claimed in claims 1-3, and are analyzed as discussed with respect to the rejection of claims 1-3.

Regarding claim 19, Rakib further discloses the tuned digital television signal is re-encoded at a lower bit rate prior to being transmitted to the remote STT (transcoder 327

translates the bit rate of the compressed video down to the lower rate when necessary before transmitted the digital televisions signal to the television adapter – figures 4a-5, paragraphs 0237-0239).

Regarding claim 20, Rakib further discloses the digital television signal is an MPEG-2 signal (figures 4a-4b, paragraphs 0020, 0034-0039) and the transcoder translates the bit rate of the compressed video down to a low rate necessary because of current loading conditions on the LAN (paragraph 0237). It is obvious to one of ordinary skill in the art the use MPEG-2 signal at a 3 Mbps bit-rate in order to achieve user's desired.

Regarding claim 21, Rakib further discloses transcoder translates the bit rate of the compressed video down to a low rate necessary because of the loading conditions on the LAN (paragraph 0051, 0237-0239). It is obvious to one of ordinary skill in the art that the re-encoding format (by the transcoder) is selected from the group consisting of H.263 and low bit-rate MPEG-2 in order to reduce bandwidth used to transmit the digital signal.

Regarding claim 52, the limitations of a master STT in television distribution system correspond to the limitations of the master STT as claimed in claim 17, wherein the second receiver correspond to the receiver, and are analyzed as discussed in the rejection of claim 17. Rakib further discloses a remote STT terminal (interpreted as video adapter – figure 5) comprising:

a first receiver (e.g. NIC or IP video – figure 5) for receiving an encoded video signal from a mater STT (gateway – figures 4a-5);

a decoder (e.g. MPEG decoder 264) coupled to the first receiver and translating the encoded video signal into a decoded video signal suitable for a viewing device (decode the encoded signal to decoded signal for display on the display device such as television display, pc, etc. – figures 3-5);

a user interface (remote control or keyboard – figures 3-5) receiving a user input (e.g. user select a television signal/channel) and converting it to a control signal (convert the user input data to a control signal for selecting a channel/television signal– figures 3-5);

a first transmitter (IR and/or RF receiver 82) coupled to the user interface and sending the control signal to the master STT to achieve a change in the encoded video signal (IR and/or RF receives control signal such as tune to another television signal from the keyboard or remote control and send the control signal to the gateway to request for tuning to another television signal – see include, but not limited to, figures 3-5)

a receiver receives a change in the encoded video signal responsive to the control signal, wherein the remote STT sends the change to the viewing device (NIC and IP video receives the encoded new television signal in response to the control signal to tune to new television signal, the video adapter processes the new encoded video signal and send the new video signal to viewing device (i.e. television display) – see include, but are not limited to, figures 3-5).

Regarding claims 53-59, the additional limitations as claimed correspond to the additional limitations as claimed in claims 2-3, 6-7, 11-13 and are analyzed as discussed with respect to the rejections of claims 2-3, 6-7, 11-13.

Regarding claim 63, Rakib teaches a master STT as discussed in the rejection of claim 52. Rakib further discloses the gateway is connected to cable modem and receives content from Internet and provided the content to the video adapter for display (figures 2-5). It is obvious to one of ordinary skill in the art that the gateway comprises a web browser so that the user can browse the Internet; thereby allow the user to locate the content from Internet easily.

7. Claims 15, 60-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib et al. (US 2004,0172658) as applied to claim 1 or claim 60 above, and further Ellis et al. (US Pat. Pub. No. 2005/0028208).

Regarding claim 15, Rakib discloses a master system as discussed in the rejection of claim 1. Rakib further discloses the received multiplexed signal further comprises a program information component (e.g. video data, voice data, pictures, etc. – paragraphs 0050, 0080-0081, 0135). However, Rakib does not specifically disclose the master STT comprises a program guide generator, receiving the program information from the received multiplexed signal and generating a program guide therefrom that can be

transmitted by the transmitter upon user request for the program guide at the remote STT.

Ellis discloses a master STT (interpreted as distribution facility 16) receives the program information component (e.g. program guide data such as program title, channel, etc.) from main facility (figure 1, paragraph 0067); the distribution facility comprises program guide generator (program guide server), receiving the program information from the received multiplexed signal transmitted from main facility and generating a program guide therefrom that can be transmitted by the transmitter (e.g. communication device) upon user request for the program guide at the remote STT (user television equipment 22 and/or remote access device 24 – see include, but not limited to, figures 2a-2d, 6a-8, paragraphs 0067-0069, 0102, 0109-0110). Therefore. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib to use the teaching as taught by Ellis in order to allow user to navigate the program guide using remote control (paragraph 0004), thereby allow user to locate the desired information easily.

Regarding claim 60, the additional limitation of the system as claimed correspond to the additional limitations of the master STT as claimed in claim 15, and are analyzed as discussed with respect to the rejection of claim 15.

Regarding claims 61-62, the additional limitations that correspond to the additional limitations as claimed in claim 16 are analyzed as discussed with respect to the

rejection of claim 16 . However, Rakib does not specifically disclose the remote STT comprises a web browser to browse a plurality of websites, or the remote STT comprises an Internet connection coupled to a web brower.

Ellis discloses the user television equipment and/or remote access device comprises a browser and a Internet connection coupled to the web browser ( e.g. communication device such as a modem coupled to Internet and web browser so that the user can browse website from the Internet - see include, but are not limited to, figures 2a-2d, 4-6c, paragraphs 0006, 0020, 0079, 0110, 0027). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib to use the teaching as taught by Ellis in order to allow user to locate content from Internet easily.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rakib et al. (US 6,889,385) discloses home network for receiving video on demand and other requested programs and services.

Ho (US 6,622,307) discloses multiple room signal distribution system.

Horne et al. (US 5,515,377) discloses adaptive video encoder for two layer encoding of video signal on ATM networks.

Takeuchi et al. (US 2002/0051581) discloses video signal encoder and video signal decoder.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 9:00 - 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Son P. Huynh

December 7, 2006

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